



EXOHOST

Stellar Spectroscopy with ESO Instruments

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La Silla: 3.6m and 2.2m telescopes

2.2m

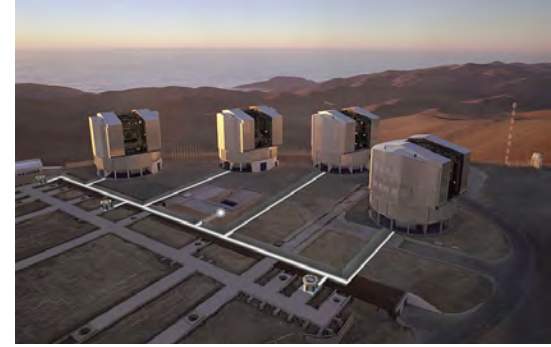
- FEROS: Cross-dispersed echelle $R=48000$, range 350-920nm, single fiber.

3.6m

- HARPS: Cross-dispersed echelle $R=115000$, range 422-691nm, double fiber, spectropolarimeter, Laser Frequency Comb and a new solar telescope.
- NIRPS: Cross-dispersed echelle $R=100000$, 0.95-1.8 μ , double fiber, AO system, works simultaneously with HARPS, LFC is coming.

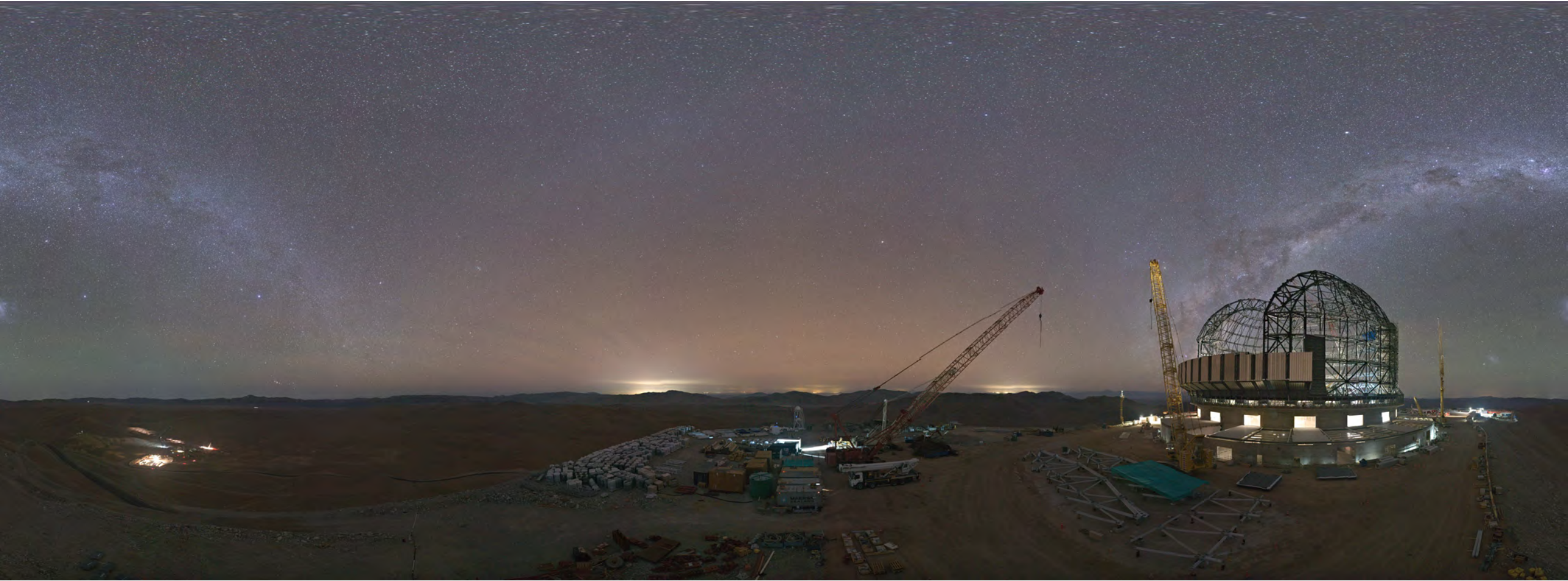


Paranal: UTs



- FLAMES: multi-object single order echelle, medium/high $R=5500-40000$, 130+ fibers in 25' field. 8 fibers connect to UVES. IFU.
- UVES: cross-dispersed echelle, two arms, $R=40000$ (fiber), up to 80000 (blue) and 120000 (red). Range 300-500nm in blue arm and 420-1100nm in red arm, slit or fibers from FLAMES.
- CRILES+: cross-dispersed echelle, $R=100000$ (up to 170000), range 0.95-5.3 μ , each of YJHKLM band (partially) covered in a single exposure, spectropolarimeter, Fabry-Perot for wavelength calibration, long 10" slit.
- X-shooter: 3-arm cross-dispersed echelle, UVB 300-560nm, VIS 560-1024nm and NIR 1024-2480nm. Slit, Cassegrain focus.
- ESPRESSO: cross-dispersed echelle, $R=70000-190000$, range 380-788nm, four fibers, LFC, works with any UT or all UTs.

ARMAZONES (ELT)



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- METIS: infrared high-contrast imaging, low R spectrometer and high R IFU, L, M and N bands. 1" IFU uses single order echelle with $R=120000$ in 3-5 μ range.
- HARMONI: IFU with a single order echelle in the range of 0.47-2.45 μ covering small interval in a single exposure. $R=3000$, 7000 or 18000.
- ANDES: 3 spectrometer cross-dispersed echelle, fiber bundles (up to 64) to increase the resolution or create 1.5" IFU. $R=120000$. Range 0.35-2.45 μ (TBC).
- MOSAIC: multi-object 250 fiber medium $R=25000$ cross-dispersed echelle.

Conclusions

Today:

- Nearly all objects have been observed one way or another. Look in the ESO archive.
- If the reduced data is not so good, check if re-reduction can help. Specially true for older instruments like UVES, FEROS etc.
- Archival search also provides good arguments for observing proposal.

Future:

- Here are the real opportunities to learn and join.
- ELT instruments can use all the help they can get.
- Developing an instrument gives the expertise and early access to the ELT.